USGS science for a changing world

Earthquake Shaking **Green** Alert

GSN ANSS USAID FROM THE AMERICAN PEOPLE

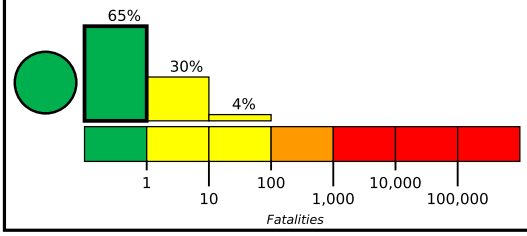
M 5.5, 26 km SW of Santa Rosa del Sur, Colombia

Origin Time: 2022-02-23 12:49:31 UTC (Wed 07:49:31 local)
Location: 7.8174° N 74.2494° W Depth: 50.7 km

PAGER Version 5

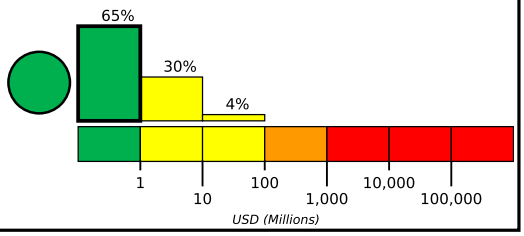
Created: 1 week, 6 days after earthquake

Estimated Fatalities



Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.

Estimated Economic Losses

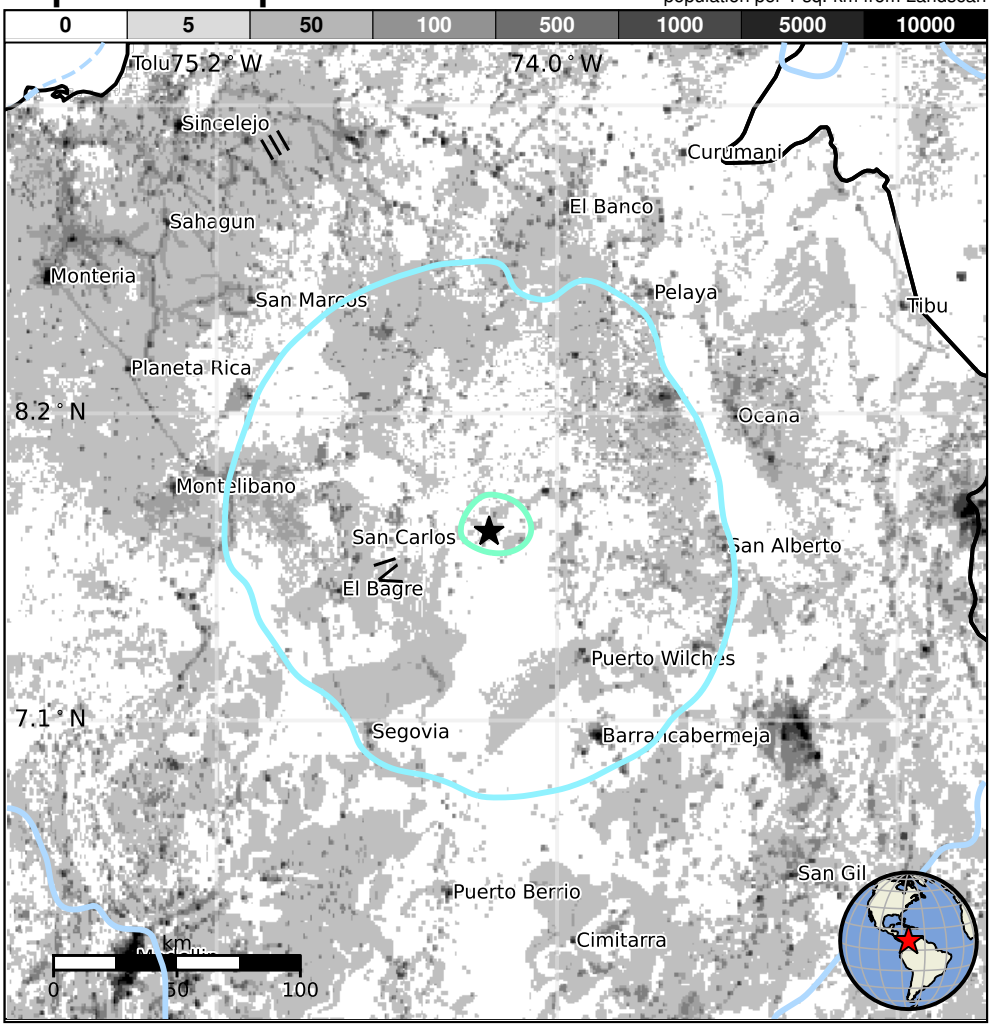


Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		–*	11,476k	1,186k	6k	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		**I**	**II-III**	**IV**	**V**	**VI**	**VII**	**VIII**	**IX**	**X+**
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	**Resistant Structures**	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure



Structures

Overall, the population in this region resides in structures that are vulnerable to earthquake shaking, though resistant structures exist. The predominant vulnerable building types are mud wall and informal (metal, timber, GI etc.) construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1993-07-22	371	6.0	VIII(1k)	2
1992-10-18	288	7.1	IX(22k)	1
1981-10-18	195	5.9	VII(129k)	15

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

Selected City Exposure

from GeoNames.org

MMI	City	Population
IV	Santa Rosa del Sur	9k
IV	Simiti	7k
IV	Montecristo	6k
IV	**San Carlos**	**23k**
IV	Cantagallo	5k
IV	Nechi	7k
III	Bucaramanga	572k
III	Cucuta	721k
III	**Monteria**	**272k**
III	**Sincelejo**	**261k**
II	**Medellin**	**2,000k**

bold cities appear on map. (k=x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

https://earthquake.usgs.gov/earthquakes/eventpage/us7000gn6g#pager

Event ID: us7000gn6g